

Recommendations for Completion of the Work of the LCFS Sustainability Standards Advisory Committee

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Sustainability assessment for in-state producers of biofuels

The LCFS requires that sustainability standards be considered in identifying acceptable transportation fuels. Rather than adopt existing third party standards and certification procedures as part of the sustainability requirements for the LCFS, CARB should use this requirement as an opportunity to review relevant existing or pending legislation and regulations across the many agencies charged with managing the environment of California. This is consistent with the intent of all the state's recent governors, including Governor Brown, who have called for greater policy integration and better coordination of government to achieve agreed public goods¹.

The idea of sustainability embodies concern for a broad set of public goods that include conservation of economic, environmental and other social goods, an integrated perspective that allows for tradeoffs and net benefit assessment, the need to anticipate their use for the longest future time frame, and public participation in defining goods and the means for their attainment. The LCFS' requirement for sustainability standards provides an opportunity to list and evaluate the state's most relevant laws and regulations, and to evaluate how well sustainability is already embodied as a component of public policy. Concern for adequate public participation and effective process also is included in the notion of sustainability, so a review of participatory mechanisms, including specific technical advisory groups that include public participants helping draft or guide regulation should also be included. Many statutes and regulations are characterized by strict prohibitions, quantitative limits on many emissions to air, land, and surface and ground water. Associated penalties include financial and criminal liability.

California has created and continues to support an advanced public policy process focused on most economic and social activities directly affecting the state's natural resources. Natural resources include land, air, water and biotic communities. Current regulatory standards collectively reflect the outcome of legislative and executive agency activities, and many have been tested by courts. All state agencies include advisory groups and have processes for soliciting public participation. The LCFS sustainability advisory group is an example, but there are many others. Public hearings are used to evaluate most if not all significant regulations

¹ Governor Brown has made an on-going effort to streamline government and make it more effective: http://gov.ca.gov/docs/Cover_Letter_and_Summary.pdf. An example of efforts to improve efficiency by reducing unnecessary reporting requirements is a recent executive order (B-14-11): <http://gov.ca.gov/news.php?id=17495>

adopted in the state. There are strong transparency protections embodied in law². Collectively, these reflect and result in the broadest sense, in a level of social agreement about how natural resources should be conserved or used to advance public welfare.

What is not addressed currently in law or regulation in California still has a high probability of being addressed in the future, even in the absence of the LCFS and its requirement for sustainability standards. The impending Bay/Delta Conservation plan is an example of a multi-year effort to address critical but difficult water supply and management issues in California³. There are many others associated with water, forestry, agriculture and natural resource extraction, including the development of alternative energy. These programs operate in addition to the overall environmental regulations like CEQA, and state and federal air, water and endangered species laws and regulations. To pick one example that focuses specifically on the sustainability of agriculture: The Central Valley (CV) Salts program operated by the Central Valley Regional Water Resources Control Board specifically defines itself as a sustainability process⁴. This is not an isolated example of public process affecting natural resources, with conscious intent on sustainability.

Between the extensive safeguards and processes regulating environmental quality in California, and the performance based incentives towards RUE in the LCFS, significant guarantees of sustainability already exist to influence alternative fuel production within California. Besides a specific requirement to identify sustainability criteria, the LCFS already includes a powerful incentive towards sustainable transportation fuel production. The LCFS is a performance standard. It functions to identify and reward resource use efficiency (RUE) in transportation fuel production. Maximizing the efficient use of the most GHG intensive inputs and transformation processes in the production of an alternative fuel results in the lowest possible fuel Carbon Intensity (CI), and the best value in the fuel market. RUE in fuel production, together with documentation of improvements in RUE over time, are fundamental aspects of site-specific sustainability assessment. These assessments are essential to the successful marketing of fuels within the state under the LCFS. This important sustainability outcome is a beneficial consequence of the character of the regulation as a performance based standard.

For US domestic biofuels imported into CA, there may be serious jurisdictional issues associated with the EISA and RFS2. This has already resulted in a legal setback for the state's regulation of alternative fuels⁵. Establishing a sustainability standard that acts as a further restriction or import barrier may further complicate implementation of the LCFS. US EPA is charged with regulating the RFS2 regulations, including issues associated with sustainability. It may be necessary for CA to use EPA's determination of acceptability for domestic fuel production. In that case, fuels producers in CA will be subject to more stringent regulation than those in other locations, by virtue of California's generally more extensive regulatory environment.

For non-domestic biofuels that would be imported into the state, there are several competing frameworks for evaluating sustainability that should provide sufficient assurance to the state.

² <http://oag.ca.gov/government>

³ <http://baydeltaconservationplan.com/Home.aspx>

⁴ see : CV-SALTS Update on Development of Master Salt and Nitrate Management Plan for the Central Valley of California as an example of what this process looks like. <http://www.cvsalinity.org/>

⁵ <http://www.ascension-publishing.com/BIZ/LCFS-plaintiff-ruling-122911.pdf>

There have been many recent efforts both domestically and internationally to define sustainability standards to influence and guide trade in bioenergy feedstocks and fuels. Many are high level efforts and have created detailed rationales and procedures⁶. These may be of value to CARB for purposes of comparison and in evaluating the sustainability of any biofuels imported into California. There are several competing standards and certification systems. It is hard to conceive why small variations among these standards would make any practical difference in outcomes. The purveyors of such standards should be welcomed to make a case for their system. I would judge them on a cost basis, other things being equal. But third party standards should not be substituted or adopted as guidelines for in-state production in ways that undermine or supersede California's existing laws, regulations and public processes. These already constitute a model for sustainability standards. The judgment of outside reviewers, even if competent, should not substitute for legitimate political and regulatory process within the state for evaluating in-state biofuel production.

Recommendations for the LCFS advisory group:

The LCFS advisory committee and staff have spent considerable energy reviewing existing standards. There is sufficient agreement about the general objectives associated with sustainability but not about the details of their application. Agreement at a general level is sufficient to allow examination of existing state laws and regulations for specific application to sustainability of in-state feedstock production for biofuels and bioenergy. There is no need for further discussion about the meaning of sustainability at a general level⁷.

To be useful, staff for the CARB, the LCFS Sustainability advisory work group should consider a specific set of actions.

For in-state bioenergy production for transportation:

1. Review relevant state laws and regulations with the help of state agencies. The Bioenergy Interagency Work Group might be asked to support this effort by drawing on help from all its affiliated agencies.
2. Gap identification: Based on that review, identification by staff and the advisory committee of any omissions, missing guidelines, or regulations that are important, practical, cost-effective, and unlikely to be addressed by current agency actions or likely future process in the state,

⁶ The Roundtable on Sustainable Biofuels is one of the best known and developed (<http://rsb.epfl.ch/>), but there are a number of others, many recognized for this purpose as well by the European Union: http://ec.europa.eu/energy/renewables/biofuels/sustainability_schemes_en.htm

⁷ This limitation on specificity about the meaning of sustainability was considered adequate to allow for useful research assessing sustainability in a recent report from the National Research council: Millett and Estrin (eds). 2012. Computer Research for Sustainability, National Academies Press, Washington, DC: "An often-cited definition of "sustainability" comes from the Brundtland Commission of the United Nations (UN): Sustainable development ... meets the needs of the present without compromising the ability of future generations to meet their own needs."¹ The UN expanded this definition at the 2005 world summit to incorporate three pillars of sustainability: its social, environmental, and economic aspects.² This report takes a similarly broad view of the term." (page 14) This broad definition was sufficient to support a focus on more specific, concrete examples of sustainability issues and the supportive research needed.

3. Address these gaps via new, specific LCFS sustainability guidelines/regulations that the LCFS advisory committee has been asked to develop (I have suggested a pathway for agricultural systems⁸).

For US domestic production (challenging)

A set of questions should be discussed:

1. Is the current US biofuel production and supply system sustainable based on RFS2 criteria?
2. If not, what can CARB and California do to improve that circumstance?
3. If yes, are there additional needs for sustainability associated with the LCFS not included in the RFS2? What can be done to bridge differences?

Related (challenging) questions:

Does the US need a national sustainability standard?

Is such a standard possible?

If one were adopted would it be meaningful?

International Production of Biofuels and Their Import into California :

A set of questions should be discussed:

1. Can California require something different or something more than the US EPA requires for determining acceptability of imported biofuels? Would such requirements conflict with federal requirements in some way?
2. If California can require its own safeguards or guidelines, then diverse, existing international standards, or in-country sustainability certification systems should be reviewed from the point of view of acceptability in California. CARB staff and LCFS Sustainability Standards advisory Committee should identify criteria for this review.
3. Pick one or more based on agreed criteria, including cost.

Write LCFS standards, submit report.

Review and revise continuously.

In addition, the advisory committee might consider how it can create guidelines and processes to help develop the sustainable fuels mandated by the LCFS. For example, the creation of programmatic EIRs can help simplify fuel production while be protective of environmental and other important public goods.

⁸ http://www.arb.ca.gov/fuels/lcfs/workgroups/lcfsustain/SteveKaffka_CARB_Sustainability_3-20-12.pdf